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## RESEARCH

### O corpo fala: aspectos físicos e psicológicos do estresse em profissionais de enfermagem

The body speaks: physical and psychological aspects of stress in nursing professionals

El cuerpo habla: aspectos físicos y psicológicos del estrés en los profesionales de enfermeira

Cláudia Cristiane Filgueira Martins Rodrigues <sup>1</sup>, Viviane Euzébia Pereira Santos <sup>2</sup>

#### ABSTRACT

**Objective:** identifying the effects of stress on the physical and mental body of nursing professionals working in the ICU of a university hospital in Natal, RN. **Method:** it was a qualitative study of a descriptive approach, conducted together with twenty-one nursing professionals of that institution. Data collection took place from a semi-structured interview. This started after the study was approved under the CEP-HUOL under number of CAAE 0037.0.294.000-11. The analysis of these data was done by content analysis. **Results:** the category resulting from the analysis of these data was titled "The suffering body: the manifestations of stress" and among the most evident symptoms by respondents highlight the physical and mental fatigue, muscle pain, imbalance in the cycle of weight. **Conclusion:** these symptoms contribute to professional stress and diminish the quality of life of these workers in their work environment. **Descriptors:** Nursing, Stres, Intensive care unit.

#### RESUMO

**Objetivo:** identificar os efeitos do estresse no corpo físico e mental dos profissionais de enfermagem que atuam na UTI de um hospital universitário em Natal, RN. **Método:** tratou-se de um estudo qualitativo de abordagem descritiva, realizado junto a vinte e um profissionais de enfermagem da referida instituição. A coleta de dados se deu a partir de uma entrevista semiestruturada. Esta iniciou após a aprovação do estudo no CEP-HUOL sob nº de CAAE 0037.0.294.000-11. A análise desses dados se deu por análise de conteúdo. **Resultados:** a categoria resultante da análise desses dados foi intitulada de "O corpo que sofre: as manifestações do estresse" e dentre os sintomas mais evidenciados pelos entrevistados destaca-se o cansaço físico e mental, dores musculares, desequilíbrio no ciclo do peso. **Conclusão:** esses sintomas contribuem para o estresse profissional e diminuem a qualidade de vida desses trabalhadores em seu ambiente de atuação. **Descritores:** Enfermagem, Estresse, Unidade de terapia intensiva.

#### RESUMEN

**Objetivo:** identificar los efectos del estrés sobre el cuerpo físico y mental de los profesionales de enfermería que trabajan en la unidad de cuidados intensivos de un hospital universitario en Natal, RN. **Métodos:** se realizó un estudio cualitativo con un enfoque descriptivo a veintiún profesionales de enfermería de la referida institución. La recolección de datos se llevó a cabo a partir de una entrevista semi-estructurada. Esta comenzó después de la aprobación del estudio en el CEP-HUOL bajo número de CAAE 0037.0.294.000-11. El análisis de estos datos se realizó mediante análisis de contenido. **Resultados:** la categoría resultante del análisis de estos datos se titulaba "El cuerpo sufriente: las manifestaciones del estrés", y entre los síntomas más evidentes de los encuestados se destacaron la fatiga física y mental, dolores musculares, el desequilibrio en el ciclo de peso. **Conclusión:** estos síntomas contribuyen para el estrés profesional y a disminuir la calidad de vida de los trabajadores en su entorno laboral. **Descriptor:** Enfermería, Estrés, Unidad De cuidados intensivos.

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## INTRODUCTION

**S**tress has a direct influence on the personal and professional life of all individuals, likely to cause a trouble in the internal balance of the organism.<sup>1</sup> And this imbalance is directly related to health and disease aspects of these subjects.

The development of a state of stress is closely related with what is seen as a stressing factor for the individual. This source of stress may have foreign origin, and those related to the profession, fights, losses; and internal origin, these being the way of being, our beliefs and values, act in a way.<sup>1</sup>

Among external sources most closely related to the development of individual stress, we point out work. After all, the work functions as a source of construction, fulfillment, satisfaction, wealth and useful services to human society. However, it can also mean slavery, exploitation, suffering, loss, illness and death.<sup>2-3</sup>

Thus, the impact of stress at work can be felt by the organization through high rates of absence and income, lack of innovation and poor productivity of these professionals. Thus, if the body remains to feel the impact of stress in its daily actions, the physical body responds with syndromes and diseases associated with this disruption of the balance.<sup>4</sup>

Still, it is noteworthy that among the professions and types of work existing in society, there are considered to be the most stressful ones those which deal with interpersonal relationships, caring for each other; among these, health professionals and teachers. In this study, we highlight the healthcare, specifically the hospital nursing staff.

In this scenario mediated by rules, schedules, wages, scale outages, discharge, deaths, direct care with the other, lack of a specific routine and professional relationships that can generate little pleasure and many disagreements in the nursing staff, which may give the appearance of daily stressors, and therefore imbalance in the body and mind of these individuals.<sup>5</sup>

It is also worth mentioning that the study environment was the Intensive Care Unit. In this environment, nurses are faced with patients who need full-time care, and may act in urgent and emergency situations, as there are patients at risk of death, plus a small and closed environment, with a team working in a complementary way, which may be the focus of disagreements among these professionals.

Thus, it is important to recognize what are the effects of stress on the physical and mental body of those nurses working in the ICU of a university hospital in Natal-RN. For

elucidating these effects it can work with these professionals in ways to improve the quality of life in the workplace of these individuals.

Thus, this study aimed to identifying the effects of stress on physical and mental body of nursing professionals working in Intensive Care Unit (ICU) of a university hospital in Natal-RN.

## METHOD

This was a qualitative study of a descriptive approach. This allows the researcher to a larger property to addressing and understanding the reality studied; allowing also an intersection and integration between the literature and the issues addressed in the study, which involves a more comprehensive and reliable approach between the perceptions of members of the nursing staff of the University Hospital ICU, about the reality they live.<sup>6</sup>

For the data collection instrument set up a socio-demographic questionnaire to characterize the subjects of the study and a semi-structured interview in which the researcher obtained data that was provided by the study subjects according to their experiences and direct confrontations with the occupational stress and their routine in intensive care, becoming an important tool for translation of a performance every day, sometimes stressful.<sup>7</sup>

Data collection started after the study was submitted to the Research Ethics Committee of that hospital, being approved and getting number of CAAE 0037.0.294.000-11. Twenty-one ICU nurses participated in this study; from that: five nurses and sixteen nursing technicians. All met the following inclusion criteria: work in that sector for at least six months; being not on vacation or license of any kind; accept sign the free and informed consent form (ICF).

Data were transcribed and analyzed according to thematic content analysis method. This analysis method allows a systematic evaluation of messages from partners; summary of the data according to the steps of pre-analysis, arranging the initial ideas and preliminarily systematizing the information collected; analysis, encoding the information via a thematic evaluation; and interpretation raised when the meaning units present in the interviews, defining the themes that base the study.<sup>8</sup>



After this process, categories were created in order to rank the lines of respondents in the components of a common set of ideas. This being titled: The body suffering: the manifestations of stress.

## RESULTS AND DISCUSSION

Regarding the characterization of the study subjects, it was noticed that most were female, aged between 30 and 39 years old, married, with double employing bonds; and some of them with triple bond.

This scenario is consistent with the current reality of nursing professionals. Since this is an eminently female profession and the occurrence of this can generate sometimes triple bond, because in addition to exercise the profession, these women also work at home, in their "obligations" of mother and wife.<sup>9</sup>

This has resulted in an accumulation of different origins and tasks that focuses on the health of these workers. It is also important emphasizing that living with the need to work outside home and with the desire to care for their children brings to these contradictions and conflicts in these women.<sup>10</sup>

Moreover, the necessity of the double bond was also evidenced in the literature as a constant in this profession. Often it is related to shift work, low wages, social and individual factors that cause the increase in workload.<sup>11</sup>

It can be seen still to this study that the increase in working hours is a determining factor for diseases triggering the body and the employee's mind. Often this professional has a life dedicated almost exclusively to the working day, restricting their leisure time, sleep, rest and other activities those trigger a series of reflections on the body and mind of those workers, as can be seen in category below.

### **The body that suffers: the manifestations of stress**

Health professionals are constant victims of physical and psychological problems in the course of a working day or even after some time of working in the area. These problems, in most cases, are associated with the workplace reality, as also the rhythm and loads of action of environment, which are potential source of stress.

This aspect of stress is mentioned by some authors<sup>1;12-13</sup> as the most harmful to health of body and mind of the worker. Physical symptoms most often are: increased sweating, muscle tension, tachycardia, hypertension, jaw tightening, gnashing of teeth, hyperactivity, nausea, and cold hands and feet.<sup>1</sup>

Among the psychological aspects there were mentioned: anxiety, tension, anxiety, insomnia, alienation, interpersonal difficulties, doubts about themselves, excessive worry, inability to concentrate on matters other than the stressor, inability to relax, anger, emotional hypersensitivity.<sup>1</sup>

These signs and symptoms are evidenced depending on the stage of stress that the individual is experiencing. In this study, the nurses and technicians, the stage was the predominance of stress resistance and therefore the signs and most prominent symptoms were problems with memory, tingling of extremities, constant tiredness, thinking in one subject, excessive irritability and emotional sensitivity.

This reality can trigger a series of events harmful to the service daily life of these workers, for example, safety impaired of the patient, musculoskeletal pain, problems of coexistence between the team, emotional involvement with patients, among others.

Another important point to mention is that nursing technicians reported greater physical complaints, about 76,4%; while among nurses most predominant symptoms are psychological, about 57,1%.

This data refers to the role that each employee plays in intensive care. The technical team performs procedures involving greater physical exertion, like lifting and patient transport, bed bath, among others. While nurses perform a task that stands by the accumulation of administrative and bureaucratic tasks, pressures and demands of leadership and distancing between the physical work and the actual work.<sup>14</sup>

In the interviews, there are cut-outs of how the working environment influences health and disease process of these nursing professionals:

*Tiredness, fatigue [...] Because, well, you work in an ICU in a critical sector you have to just ... have to be ready to care for your patient, you have to come with a willingness to work. So, so when you work in two UTI's it is much heavier. (TE2).*

*Yeah, I think physical fatigue itself. Especially leg pain, because I spend the day standing, and as I am with morning student standing and afternoon in the ICU [...] I think the physical fatigue and mental stress as well. Sometimes you get a little bad-tempered; sometimes I'll see even crudely, is answering something, think resultant to those other factors. (E1).*

*Yes, my arm. If I have too anxious, I feel very tense. I do not even picking up weight, if I have a lot of stress here that my [referencing the shoulder] is in time to explode and severe headache. (TE8).*

In these reports, it is clear that the physical fatigue as a result of a day's work is a constant. It is also evidenced a lack of time for leisure, causing systemic effects and emotional and physical exhaustion in these professionals.<sup>15</sup>

This same fact was perceived by a survey of hospital nurses in an intensive care unit in Sao Paulo, and physical tiredness appeared as prevalent among these professionals. The study includes that they feel exhausted, with little power, and the impression we have is that they have no way to recover these energies.<sup>16</sup>

As a result, professionals are little tolerant, easily irritable and nervous in the workplace, as well as with friends and family.<sup>16</sup>

These symptoms are noticed often the workloads present in the intensive care environment. These can be defined as elements of the acting process that interact with each other and with the professional body, triggering changes in biopsychic processes that manifest themselves with potentially affected physical and psychological tension.<sup>17</sup>

Regarding the charges present in the intensive care every day, studies show that they are related to environmental characteristics, the number of professionals per patient, the site of action organization. In intensive care, one can find those classified as chemical, as with drugs, biological, such as contact with sharps, and the psychic, which depend on each professional; all can cause stress directly into the worker's body.<sup>18</sup>

These factors directly influence on the quality of patient care and quality of life for professionals and hospital costs resulting from nursing staff.

Another physical symptom that was envisioned in the interviews is related to disturbances in the professional weight cycle, as noted below:

*I gained 30 kilos over a period of about 3-4 years [...] the question of memory, too, the lack of memory ... (E3).*

*After I started working I gained weight about 20 kilograms or more [...] Over the 10 years, or 30 kilograms, it is a lot of weight, right? So that's why I feel it and the emotional, psychological point of view, I realize that my own patience, sometimes I'm very angry. (E4).*

*I lost weight considerably about four years now, I've lost four kilos and never recovered... (TE6)*

*I get home; I sleep when I can, because sometimes I'm so busy that it takes me long to sleep ... (E3).*

This can be understood by the living habits of these professionals, since these do not help in maintaining a healthy diet or in regular physical exercise, resulting in an accumulation of weight or even weight loss.

This fact was seen in the literature, describing that stress generates food behavioral changes, which leads to changes in weight, body mass index and cortisol activity, and it carries a weight gain or a loss, it will depend on the body involved.<sup>19</sup>

In addition, stress can contribute to this weight gain, even if the person does not eat much, as there is a rise in cortisol, which stimulates the desire to eat and the proliferation of the body's fat cells.<sup>20</sup>

Another problem mentioned by respondents was the memory deficit. This symptom was also found in the literature: the difficulty in maintaining the preserved memory was present among respondents, regardless of working time.<sup>21</sup>

Symptoms of this type are reflections of the cognitive effects of stress on the individual's body, as when you are experiencing stress, the mind finds it difficult to stay concentrated, increasing inattention and reducing the amplitude of the short and long term memory.<sup>22</sup> The fact is that health care workers, especially those in nursing, do not realize the harm that excessive work can lead to physical and psychic organism. Thus, the body ends up answering in the form of various signs and symptoms, and may even reach the exhaustion and tiredness.

One has to think and realize ways of intervening in reality, causing professionals reflect and minimizing the damage caused to them in their work environment, so that they are able to understand their disease process in the performance environment and discuss the issues for the tiredness, instrumentalizing these professionals to take care of themselves.<sup>23-24</sup>

This will be only possible if these professionals spend thinking about their work process and how this can interfere with the illness of the body and their mind. With this, there will be a greater awareness and thought to engage and pamper themselves in the environment in which they operate professionally.

## CONCLUSION

Stress is present in the actions and interactions of humans with the environment, since stimulus, emotion or activity is able to release it. However, when going to live in a tense every day, stress becomes evil and capable of causing damage to the physical and mental body.

On the working environment, times of stress are essential to the continuity and development of tasks, but from the moment that these episodes happen often, the body stands up risk for itself, as something that demands more and more energy to be experienced, aspect that can be the cause of disease and suffering, and makes the worker perceives the workplace as something harmful to his body.



This became evident in this study, therefore, the workers had a regular work pace, often with dual employment, and that the physical body responds in the form of physical and mental fatigue, weight changes cycle, changes in sleep, musculoskeletal pain and insomnia.

In this sense, it is essential to think and make these professionals think about taking care of themselves in their work environment. This is an issue that takes emphasis these days due to the demand for improvements in performance conditions, as well as the reduction of working hours of nursing professionals to 30 hours per week and the struggle for more decent wages.

This reinforces the need for studies that address the health worker illness. After all, these are fundamental to the understanding of occupational stress and the physical problems and mental of those workers, contributing to improve the quality of life in labor environment of these professionals.

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